CLAIMS

What is claimed is:

1. A continuous flow catheter, said catheter comprising at least two lumens, each of said at least two lumens having a proximal end and a distal end region, each of the distal end regions of each of said at least two lumens comprising at least one opening for the passage matter into or out of the body of the user of the catheter, at least one of said at least two lumens being a first lumen and at least one of said at least two lumens being a second lumen, said second lumen being longer than said first lumen, wherein said distal end region of said second lumen is coiled.

2. The continuous flow catheter of claim 1, wherein matter passes into the body of the user of the catheter through said first lumen, and matter is removed from the body of the user of the catheter through said second lumen.

3. The continuous flow catheter of claim 2, said catheter further comprising a diffuser, said diffuser located over the at least one opening in said first lumen.

4. The continuous flow catheter of claim 3, said second lumen extending beyond said diffuser more distally into the body of the user of the catheter.

5. The continuous flow catheter of claim 4, said second lumen extending through said diffuser.

6. The continuous flow catheter of claim 1, wherein said catheter is used for peritoneal dialysis.

7. The continuous flow catheter of claim 6, said catheter further comprising at least one cuff.

8. The continuous flow catheter of claim 7, wherein one of said at least one cuffs is located proximally to the peritoneal membrane.

9. The continuous flow catheter of claim 1, said catheter further comprising a hub, said proximal ends of said at least two lumens located in said hub.

10. The continuous flow catheter of claim 9, wherein said hub is passable subcutaneously through the body of the user of the catheter.

11. The continuous flow catheter of claim 9, wherein said hub is detachable.

12. The continuous flow catheter of claim 1, wherein each said lumens is "D" shaped.

13. The continuous flow catheter of claim 1, wherein at least one of said at least two lumens contains a radiopaque strip.

14. The continuous flow catheter of claim 1, wherein said distal end region of said second lumen has at least one opening in the side of the lumen for the passage of matter.

15. The continuous flow catheter of claim 14, wherein said distal end region of said second lumen has a plurality of openings on the side of the lumen for the passage of matter.

16. The continuous flow catheter of claim 15, wherein said plurality of openings are located on the inside of said coil.

17. In a catheter for the passage of matter to the body of the user of the catheter, a diffuser through which matter is dispensed into the body.

18. The diffuser of claim 17, wherein said diffuser has an interior portion and an exterior portion and at least one opening between said interior portion and said exterior portion, the matter to be dispensed by said catheter entering said diffuser and being dispensed in the body through said at least one opening.

19. The diffuser of claim 18, wherein said diffuser has a plurality of openings and the matter being dispensed in a diffused manner.

20. The diffuser of claim 19, wherein said plurality of opening are located radially around the sides of said diffuser.

21. The diffuser of claim 17, wherein said diffuser has a shape selected from the group consisting of cylindrical, teardrop, bell, round, oval, semi-round, semi-oval and a combination of shapes.

22. The diffuser of claim 17, wherein said diffuser is on a catheter used for peritoneal dialysis.

23. The diffuser of claim 22, wherein said dialysis is continuous flow peritoneal dialysis.

24. A catheter comprising at least two lumens, each of said at least two lumens having a proximal end and a distal end region, each of the distal end regions of each of said at least two lumens comprising at least one opening for the passage matter into or out of the body of the user of the catheter, one of said at least two lumens being a first lumen and one of said at least two lumens being a second lumen, said second lumen being longer than said first lumen; said matter passing into the body of the user of the catheter through said first lumen, and said matter being removed from the body of the user of the catheter through said second lumen; said catheter further comprising a diffuser, said diffuser located over the at least one opening in said first lumen and said second lumen extending more distally in the body of the user through said diffuser; said diffuser having an interior portion and an exterior portion and more than one opening between said interior portion and said exterior portion; the matter to be

dispensed by said catheter entering said diffuser and being dispensed in the body through said more than one opening in a diffused manner.

25. The catheter of claim 24, wherein said catheter is used for continuous flow peritoneal dialysis.

26. The catheter of claim 25, wherein said distal end region of said second lumen is coiled, said distal end region of said second lumen having a plurality of openings for the passage of matter.

27. The catheter of claim 26, wherein said openings are located on the inside of said coil.

28. The catheter of claim 25, said catheter further comprising at least one cuff.

29. The catheter of claim 28, wherein one of said at least one cuffs is located proximally to the peritoneal membrane.

30. The catheter of claim 24, said catheter further comprising a hub, said proximal ends of said at least two lumens located in said hub.

31. The catheter of claim 30, wherein said hub is passable subcutaneously through the body of the user of the catheter.

32. The catheter of claim 30, wherein said hub is detachable.

33. The catheter of claim 24, wherein each said lumens is "D" shaped.

34. The catheter of claim 24, wherein at least one of said at least two lumens contains a radiopaque strip.

35. A continuous flow peritoneal dialysis catheter comprising at least two lumens, each of said at least two lumens having a proximal end and a distal end region, each of the distal end regions of each of said at least two lumens comprising at least one opening for the passage matter into or out of the body of the user of the catheter, one of said at least two lumens being a first lumen and one of said at least two lumens being a second lumen, said second lumen being longer than said first lumen; said matter passing into the body of the user of the catheter through said first lumen, and said matter being removed from the body of the user of the catheter through said second lumen; said catheter further comprising a diffuser, said diffuser located over the at least one opening in said first lumen and said second lumen extending more distally in the body of the user through said diffuser; said diffuser having an interior portion and an exterior portion and more than one opening between said interior portion and said exterior portion; the matter to be dispensed by said catheter entering said diffuser and being dispensed in the body through said more than one opening in a diffused manner; said distal end region of said second lumen being coiled and having a plurality of openings located on the inside of said coil for the passage of matter; said

catheter further comprising at least one cuff, said at least one cuffs being located proximally to the peritoneal membrane.

36. The continuous flow peritoneal dialysis catheter of claim 35, said catheter further comprising a hub, said proximal ends of said at least two lumens located in said hub.

37. The continuous flow peritoneal dialysis catheter of claim 36, wherein said hub is passable subcutaneously through the body of the user of the catheter.

38. The continuous flow peritoneal dialysis catheter of claim 36, wherein said hub is detachable.

39. The continuous flow peritoneal dialysis catheter of claim 35, wherein each said lumens is "D" shaped.

40. The continuous flow peritoneal dialysis catheter of claim 35, wherein at least one of said at least two lumens contains a radiopaque strip.

41. A method for continuous flow peritoneal dialysis, said method comprising:
creating an incision in the body of the user and separating the anatomical layers;
making a circular suture in the peritoneal membrane;
making an incision in the peritoneal membrane;
inserting the catheter;

tightening the parietal peritoneum;

42. The method for continuous flow peritoneal dialysis of claim 41, further comprising anesthetizing the skin and peritoneal surface.

43. The method for continuous flow peritoneal dialysis of claim 42, further comprising

making a lateral incision in the skin of the user;

creating a skin tunnel;

passing the catheter through the skin tunnel;

connecting attachments to the catheter; and

suturing the skin incision.

44. The method for continuous flow peritoneal dialysis of claim 41, wherein said method further comprises providing a catheter having a diffuser.